

AMENDMENTS TO THE SPECIFICATION:

Please delete the header on page 1, line 1.

Please insert the following paragraph at page 1, line 4, as follows:

CROSS-REFERENCE TO RELATED APPLICATIONS

The following application claims priority to U.S. provisional application 60/518,758 filed on November 10, 2003 and PCT application PCT/JP2004/016410 filed on November 5, 2004.

Please amend the paragraph beginning on page 2, line 5 as follows:

DISCLOSURE BRIEF SUMMARY OF THE INVENTION

Please delete the header on page 2, line 6.

Please delete the header on page 2, line 11.

Please delete the header on page 3, line 1.

Please delete the header on page 2, line 7.

Please insert the following at page 3, line 6 as follows:

BRIEF DESCRIPTION OF THE DRAWINGS:

FIG. 1 is a view showing an instrument configuration of an embodiment;

FIG. 2 is a view showing a transmission and reflection model of a microwave for a silicon wafer;

FIG. 3 is a table showing a ratio of an absolute value of reflectance $|\Gamma_s|$ on a silicon wafer surface and an absolute value of reflectance $|\Gamma|$, computed by equations (16) and (19); and

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FIG. 4 is a view showing a graph of comparison of a conductivity obtained by the instrument shown in Fig. 1 and a conductivity obtained by a conventional four-point probe method.

Please amend the paragraph beginning on page 3, line 7 as follows:

MODE FOR CARRYING OUT THE INVENTION DETAILED DESCRIPTION OF THE INVENTION

Please amend the paragraph beginning on page 3, line 18 as follows:

The microwave oscillating in an oscillator 110 with a Gunn diode is applied to a silicon wafer 150 through an isolator 120, a circulator 130, and a horn antenna 140. The isolator 120 is used in order to decrease the standing wave which has an influence on the instrument operation. Then, the reflected wave is received by the same horn antenna 140, detected by a detector 160 connected to the circulator 130, and outputted as the voltage. An output voltage proportional to the square of amplitude of an electric field is obtained in the detector 160. The output voltage is converted into a digital signal by an A/D converter (not shown) and inputted to a computer 180(not shown). Because the amplitude of the wave reflected from the silicon wafer 150 is proportional to an absolute value of reflectance, the output voltage is also proportional to the square of the absolute value of the reflectance. There is a given relationship between the reflectance and the conductivity, the conductivity of the silicon wafer 150 can be determined by computing a relation with the computer 180. A principle and the like will be described in detail below.

Please delete the header beginning on page 11, line 26.

Please delete the paragraph beginning on page 12, line 1, as follows:

FIG. 1 is a view showing an instrument configuration of an embodiment;

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- FIG. 2 is a view showing a transmission and reflection model of a microwave for a silicon wafer;
- FIG. 3 is a table showing a ratio of an absolute value of reflectance $|\Gamma_s|$ on a silicon wafer surface and an absolute value of reflectance $|\Gamma|$, computed by equations (16) and (19); and
- FIG. 4 is a view showing a graph of comparison of a conductivity obtained by the instrument shown in FIG. 1 and a conductivity obtained by a conventional four-point probe method.

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